a1

which results in the solubilization and/or degradation of the extracellular matrix fibers within the wall of the biological conduit leading to enlargement of the lumen diameter.

Kindly delete claims 2, 3, 4

5. The method of claim 1 wherein the agent comprises an enzyme or a mixture of enzymes that can solubilize and/or degrade elastin, including the central amorphous component and the microfibrillar component.

6. The method of claim 1 or 5 wherein in a standard *in vitro* assay, the agent exhibits at least about 10 percent greater activity against either the amorphous material of elastin or the microfibrillar component of elastin, relative to a control.

7. The method of claim 1 or 5 wherein in a standard *in vitro* assay, the agent exhibits at least 50 percent greater activity against either the amorphous material of elastin or the microfibrillar component of elastin, relative to a control.

a2

8. The method of claim 1 wherein the agent can solubilize and/or degrade the central amorphous component of elastin and/or the microfibrillar component of elastin.

9. The method of claim 1 wherein the agent is administered by a catheter.

10. The method of claim 1 wherein the obstruction of the biological conduit is a stenosis, stricture or lesion.

11. The method of claim 1 wherein the biological conduit is an artery, vein, ureter, bronchi, bile duct, or pancreatic duct.

a2

12. The method of claim 1 wherein the agent is administered to a mammal having an obstructed biological conduit, or susceptible to an obstructed biological conduit.

Kindly add the following new claims:

40. A method for treating an obstructed biological conduit or a conduit susceptible to obstruction, comprising administering to the wall of the biological conduit an agent that can solubilize, and/or degrade a portion of the extracellular matrix of the wall of the biological conduit.

41. A method for treating an obstructed biological conduit or conduit susceptible to obstruction, comprising administering to the wall of the biological conduit an agent that can solubilize and/or degrade the central amorphous material of elastin and/or the microfibrillar component of the elastin in the wall of the biological conduit, leading to enlargement of the lumen diameter of the biological conduit.

a3

42. A method for treating an obstructed biological conduit or conduit susceptible to obstruction comprising:

administering to the wall of the biological conduit an agent; and

allowing the agent to solubilize and/or degrade a portion of the extracellular matrix of the biological conduit wall, leading to an enlargement of the lumen diameter of the biological conduit.

43. A method for treating an obstructed biological conduit or conduit susceptible to obstruction comprising:

administering to the wall of the biological conduit an agent;

allowing the agent to solubilize and/or degrade the central amorphous material of elastin and/or the microfibrillar component of the elastin in wall of the biological conduit, leading to an enlargement of the lumen diameter of the biological conduit.

44. A method for treating a obstructed biological conduit or conduit susceptible to obstruction comprising:

reducing the elasticity of the conduit wall by administering an agent to the biological conduit, whereby the agent is capable of solubilizing and/or degrading the central amorphous material of elastin and/or the microfibrillar component of elastin within the wall of the biological conduit.

45. The method of any one of claims 1 and 40 through 44, wherein administration of the agent comprises localizing a delivery apparatus in close proximity to the segment of the biological conduit to be treated.

46. The method of claim 45, wherein the method further comprises the step of inserting a portion of the delivery apparatus into the wall of the biological conduit.

47. The method of any one of claims 1 and 40 through 44 further comprising the step of pressurizing the lumen of the biological conduit while an agent, which degrades extracellular matrix fibers in the wall, is delivered to the pressurized segment of the biological conduit.

a3 Cont

48. The method of claim 47, wherein the lumen of the biological conduit is pressurized by mechanical action.

49. The method of claim 47, wherein the lumen of the biological conduit is pressurized with a balloon catheter.

50. The method of claim 47, wherein the agent is administered and the pressurizing is performed by the same device.